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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,291	02/19/2004	Yutaka Katsuyama	826.1554D	3345

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EXAMINER
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BHATNAGAR, ANAND P

ART UNIT	PAPER NUMBER
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2624

DATE MAILED: 05/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/781,291	KATSUYAMA, YUTAKA	
	<b>Examiner</b>	<b>Art Unit</b>	
	Anand Bhatnagar	2623	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 March 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3, 37-39, and 41-46 is/are pending in the application.
- 4a) Of the above claim(s) 1-3, 37-39, and 43-45 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 41, 42, and 46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☒ Certified copies of the priority documents have been received in Application No. 09/358,380.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                    |                                                                             |
|----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____                                                |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____                                                                        | 6) <input type="checkbox"/> Other: _____                                    |

***Response to Arguments***

1. Applicant's amendment filed on 03/03/06 has been entered and made of record.
2. Claims 1-3, 37-39, and 43-45 were previously withdrawn. Claims 4-36 and 40 were previously canceled. Claims 1-3, 37-39, and 41-45 are pending.
3. Applicant's arguments, see remarks pages 6-8, filed 03/03/06, with respect to the rejection(s) of claim(s) 41, 42, and 46 under 35 USC 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Nichani et al. (U.S. patent 5,949,905). Examiner refers to the rejection below.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 41, 42, and 46 are rejected under 35 U.S.C. 102(e) as being anticipated by Nichani et al. (U.S. patent 5,949,905).

Regarding claim 41: A method of setting a labeling threshold (col. 2 lines 61-64 and col. 5 lines 40-43, wherein thresholds (read as labeling thresholds) are determined based on the standard deviation), comprising:

extracting a part of a unicolor pattern from an input image (fig. 4 element 112, col. 5 lines 25-30, col. 6 lines , wherein a sampling window is determined inside the region of adhesive. The adhesive has a specific color, such as yellow, red, etc., and this the specific color of it is read as the unicolor.);

setting a threshold for determining a unicolor range with standard deviation obtained from color variance about the unicolor pattern extracted from the input image (col. 5 lines 32-39, wherein the standard deviation is used of the gray values of the adhesive sampling region to determine the thresholds for the region. It is inherent that the color, i.e. gray values, variations are determined prior to standard deviation and are used to calculate the standard deviation of the region since, by definition, standard deviation is the square root of the variance.); and

extracting a remaining pad of the unicolor pattern based on the threshold (col. 5 lines 40-50, wherein the process of segmentation takes place to extract the rest of the adhesive portion using the thresholds that are calculated).

Regarding claim 42: A method of setting a labeling threshold (col. 2 lines 61-64 and col. 5 lines 40-43, wherein thresholds (read as labeling thresholds) are determined based on the standard deviation), comprising:

dividing an input image into a matrix of rectangular picture areas (fig. 4a elements 110 and 112 wherein the image is divided into rectangular picture areas);

obtaining a color variance of the picture elements in each rectangular area (col. 5 lines 32-40 wherein the standard deviation is calculated of the sampling window, element 112. In order for standard deviation to be calculated the variance must be first determined for this region. Since the sampling window is part of the other rectangle region, element 110, then inherently this regions color variations are also determined);

extracting a rectangular area of a level color with the color variance (fig. 4a element 114 and col. 5 lines 40-50 wherein the rectangle region, using the calculated thresholds, is extracted); and

obtaining a threshold for use in the labeling process by using the standard deviation of the picture elements in the rectangular area of the level color (col. 5 lines 32-39).

Regarding claim 46: A computer-readable storage medium storing a program used to control a processor to perform a method comprising:

obtaining read information about an input image by extracting a local area from the input image and extracting color difference information about the input image from the local area (fig. 4a elements 110 and 112, wherein a local area, element 112, form the input read region is extracted and the color value, i.e. gray values, for this region are determined);

setting a labeling threshold of the input image according to the read information about the input image by setting a labeling threshold for the input image according to the color difference information (col. 5 lines 32-39);

labeling the input image using the threshold (col. 5 lines 32-39, wherein the two thresholds, i.e. read as labeling thresholds, define the range of the color of the adhesive and this is read as labeling the input image);

grouping a label pattern obtained by the labeling (fig. 4a and col. 5 lines 41-49 wherein a region is set, read as grouping a label pattern, based on the labeling thresholds);

obtaining image information about a group according to image information about a pattern in a same group (col. 5 lines 42-49 wherein the pixels belonging to the adhesive part are determined using the obtained data/information); and

extracting a pattern according to image information about the group (col. 5 lines 42-49, wherein the process of segmentation takes place to extract the adhesive pattern).

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Qian (U.S. patent 6,516,100 B1) for extracting a region from an image based on color and texture.

**Contact Information**

6. Any inquiry into this communication should be directed to Anand Bhatnagar whose telephone number is 571-272-7416, whose supervisor is Jingge Wu whose number is 571-272-7429, group receptionist is 703-305-4700, and Central fax is 571-273-8300.



Anand Bhatnagar

Technology Division 2624

May 12, 2006



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PRIMARY EXAMINER